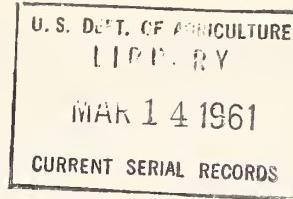


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Growth Through Agricultural Progress

## THE HOUSEHOLD MARKET FOR POULTRY PRODUCTS IN THE UNITED STATES

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THE HOUSEHOLD MARKET FOR POULTRY PRODUCTS IN THE UNITED STATES 1/

This article describes and analyzes some of the characteristics of the most important segment of the domestic market for chicken and eggs--house-keeping households--as revealed by the U. S. Department of Agriculture 1955 Household Food Consumption Survey. No special attention will be directed to turkey because too few households used the commodity in the period surveyed to provide adequate data for detailed study.

Some findings of this analysis of consumption of poultry products at home are:

1. Households in the Northeast made up the largest share of the national market for chicken and eggs 2/ consumed at home.
2. Almost all households used eggs and half used chicken.
3. Consumption of eggs per person was highest in the West, both for those purchased and for those obtained from all sources.
4. Households in the Northeast and South had the highest average consumption of chicken per person. But those in the Northeast used the most purchased chicken per person.
5. Average use of eggs per person was about the same among households at different levels of income. The rate for purchased eggs was greater at higher incomes.
6. Households with higher incomes used more chicken per person than did those with lower incomes.
7. Urban households used more eggs and poultry at home per person in a week in spring 1955 than in a comparable period in 1942 and 1948.

The Commercial Market for Eggs and Poultry Used at Home by Households

Households in the Northeast made up the largest part of the national market for both eggs and poultry meat used at home in a week in spring 1955, and those in the West the smallest (table 4). In the Northeast, use of purchased poultry products at home per person was relatively high, and a high proportion of the large population there had bought their supplies. The household market for eggs in the West was small because of its small population. Actually per person use of purchased eggs at home by western households was higher than in any other region. In contrast, they consumed less chicken per person than did households in any other region.

Urban households were much more important than rural households as a market for eggs and poultry meat for use at home in spring 1955. Not only did urban households use more purchased poultry meat per person, but exceeded

1/ By Harry Sherr, Statistical and Historical Research Branch.

2/ Includes direct use of shell eggs plus a negligible quantity of processed eggs (shell equivalent). Unless otherwise indicated, the term "eggs" in this article includes direct use only.

Table 4.- Regional and urbanization shares of the United States market for eggs and poultry used at home by housekeeping households, in a week in spring 1955 1/

| Item                       | United  | North-  | North   | South   | West    |
|----------------------------|---------|---------|---------|---------|---------|
|                            | States  | east    | Central | :       | :       |
|                            | :       | Region  | :       | :       | :       |
|                            | Percent | Percent | Percent | Percent | Percent |
| Eggs                       | :       |         |         |         |         |
| Percentage of U. S. market | 100     | 31      | 28      | 27      | 14      |
| Percentage of area market: |         |         |         |         |         |
| Urban                      | 72      | 79      | 74      | 61      | 74      |
| Rural nonfarm              | 25      | 20      | 23      | 35      | 22      |
| Farm                       | 3       | 1       | 3       | 4       | 4       |
| Poultry                    | :       |         |         |         |         |
| Percentage of U. S. market | 100     | 36      | 27      | 27      | 10      |
| Percentage of area market: |         |         |         |         |         |
| Urban                      | 76      | 84      | 77      | 64      | 79      |
| Rural nonfarm              | 21      | 15      | 20      | 30      | 18      |
| Farm                       | 3       | 1       | 3       | 6       | 3       |

1/ Derived from 1955 Household Food Consumption Survey, Reports 1-5.

Table 5.- Percentage of food dollar spent for eggs and poultry for use at home by housekeeping households, by region and urbanization, in a week in spring 1955 1/

| Item           | United  | North-  | North   | South   | West    |
|----------------|---------|---------|---------|---------|---------|
|                | States  | east    | Central | South   | West    |
|                | :       | Region  | :       | :       | :       |
|                | Percent | Percent | Percent | Percent | Percent |
| Eggs           | :       |         |         |         |         |
| All households | 3.7     | 3.8     | 3.3     | 3.9     | 4.3     |
| Urban          | 4.0     | 4.0     | 3.5     | 4.5     | 4.5     |
| Rural nonfarm  | 3.5     | 3.6     | 3.2     | 4.0     | 4.4     |
| Farm           | 1.4     | 1.6     | 1.2     | 1.3     | 2.6     |
| Poultry        | :       |         |         |         |         |
| All households | 4.8     | 5.6     | 4.0     | 5.1     | 3.9     |
| Urban          | 5.4     | 6.2     | 4.6     | 6.0     | 4.2     |
| Rural nonfarm  | 3.9     | 3.8     | 3.5     | 4.5     | 3.2     |
| Farm           | 2.1     | 2.0     | 1.3     | 2.7     | 2.3     |

1/ Derived from 1955 Household Food Consumption Survey, Reports 1-5.

the average per person quantity which rural households had consumed out of supplies obtained from all sources. Urban egg purchases per person were not high enough to offset supplies rural households obtained without direct expense.

The urbanization pattern of the market for poultry products within 3 of the 4 regions conformed in general to that for the nation as a whole (table 4). The smaller urban share in the South reflected the proportionately smaller population living in cities.

The percentage of the food dollar spent on eggs and poultry meat used at home in a week in spring 1955 was greatest among urban households and least among farm households, primarily because of differences in supplies obtained without direct expense (table 5). This pattern applied to the nation as a whole and to each of the four regions.

#### Some Characteristics of the Household Market for Poultry Products

Statistics from the 1955 Household Food Consumption Survey indicate that practically all households used eggs during the week they reported on, and a little more than half of them used chicken. 3/ Differences by urbanization in percentage of households using the item was greater for chicken than for eggs. A larger percentage of urban than rural households used chicken. The difference for chicken probably would have been narrower if the survey had covered more than a week or had been in a period other than spring.

Relatively fewer one-person households used poultry products than did larger households in all regions and urbanizations. This was particularly so for chicken.

#### Most Households Using Eggs and Chicken Purchased Supplies

More than 80 percent of the households which used eggs and chicken had bought these foods. This was because a high proportion of nonfarm households bought poultry products, and because these households represent the largest share of the total covered by the Survey. Among the four regions, the percentage buying eggs was highest in the Northeast and lowest in the South, reflecting in part the distribution of the regional population between urban and rural areas. A similar comparison for households using eggs from all sources indicated little difference among regions and urbanizations.

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3/ Data on percentage of households using chicken appear in table 10 of 1955 Household Food Consumption Survey Reports 1-5. Similar data for eggs are in table 11.

Households Used Either Purchased  
Poultry Products or Supplies  
Obtained Without Direct Expense

Nearly all households which reported using poultry products at home either purchased all they used or obtained the entire supply without direct expense--i.e., produced chicken and eggs for own use or obtained them as gift or pay.. Relatively few obtained supplies from both sources during the period reported. This has been observed for other times and places.

Here are some of the reasons why this occurred:

1. The time covered by the survey--a week-- is relatively short. If the period had been longer, or in a season other than spring, the "either/or" situation would likely be less pronounced.
2. Households keeping chickens for eggs maintain flocks sufficiently large to produce all the eggs and probably a large part of the chicken meat the household needs.
3. Spring is the peak production season of the year for eggs, and very few families with chickens would have to purchase supplementary quantities of eggs at this time of year.

Consumption of Eggs Per  
Person At Home Averaged  
Highest in West

Consumption of eggs at home averaged 7.3 per person during a week in spring 1955 (table 6). This was exceeded in all regions except the Northeast. Consumption by households in the West was highest at 7.9 eggs per person.

A little over three-fourths of the eggs consumed at home by households was purchased. For purchased eggs, too, households in the West consumed the most on a per person basis. Most of the eggs consumed by households in the Northeast and the West had been bought by them.

Farm households in each region used more eggs per person than did rural nonfarm households, and rural nonfarm generally more than urban, primarily because of variations in quantities obtained without direct expense. The reverse ranking held for purchased eggs (table 6).

In general, one-person households tended to use more eggs per person than did larger households (table 6). The only exceptions were rural non-farm households in the Northeast and urban households in the West. The general relationship also held for purchased eggs. In large part the higher consumption by one-person households was due to the fact that this group includes a very large proportion of adults who are middle age or older, and who had more meals at home during the week reported than did larger households. Most egg dishes are relatively easy to prepare.

Table 6.- Consumption of eggs at home per person by housekeeping households, grouped by income, region and urbanization, and source of supply, in a week in spring 1955 <sup>1/</sup>

| Region<br>and<br>urbanization |                   |        | Households of 2 or more persons <sup>3/</sup> |        |        |                  |           |           |
|-------------------------------|-------------------|--------|---|--------|--------|------------------|-----------|-----------|
|                               | All<br>households |        | One person:<br>households:                    |        | Total  | Under<br>\$2,000 | \$2-4,000 | \$4-6,000 |
|                               | Number            | Number | Number  | Number | Number | Number           | Number    | Number    |
|                               |                   |        | All sources                                   |        |        |                  |           |           |
| United States                 |                   |        |   |        |        |                  |           |           |
| Urban <sup>4/</sup>           | 7.3               | 9.4    | 7.3   | 7.2    | 7.3    | 7.2              | 7.5       |           |
| Rural nonfarm                 | 7.0               | 8.5    | 7.0   | 6.5    | 6.7    | 6.9              | 7.5       |           |
| Farm                          | 7.3               | 10.1   | 7.2   | 6.8    | 7.5    | 7.6              | 7.3       |           |
|                               | 8.9               | 16.3   | 8.8   | 8.4    | 9.3    | 9.2              | 8.6       |           |
| Northeast                     |                   |        |   |        |        |                  |           |           |
| Urban <sup>4/</sup>           | 6.7               | 8.3    | 6.7   | 7.2    | 6.4    | 6.4              | 7.2       |           |
| Rural nonfarm                 | 6.6               | 8.5    | 6.6   | 6.2    | 6.2    | 6.4              | 7.3       |           |
| Farm                          | 6.4               | 5.0    | 6.5   | 6.4    | 6.4    | 6.8              | 6.1       |           |
|                               | 9.2               | 17.5   | 9.0   | 1.5    | 8.3    | 8.8              | 8.6       |           |
| North Central                 |                   |        |   |        |        |                  |           |           |
| Urban <sup>4/</sup>           | 7.4               | 10.1   | 7.3   | 8.9    | 7.4    | 7.1              | 7.1       |           |
| Rural nonfarm                 | 7.0               | 9.4    | 7.0   | 8.8    | 6.4    | 6.9              | 7.2       |           |
| Farm                          | 7.1               | 10.4   | 7.1   | 7.4    | 7.4    | 6.6              | 6.6       |           |
|                               | 9.4               | 16.3   | 9.4   | 10.2   | 9.9    | 8.8              | 8.2       |           |
| South                         |                   |        |   |        |        |                  |           |           |
| Urban <sup>4/</sup>           | 7.6               | 10.4   | 7.6   | 6.7    | 7.5    | 8.5              | 8.7       |           |
| Rural nonfarm                 | 7.3               | 9.1    | 7.2   | 5.6    | 7.0    | 7.8              | 8.5       |           |
| Farm                          | 7.8               | 11.8   | 7.7   | 6.8    | 7.7    | 9.0              | 9.1       |           |
|                               | 8.2               | 15.8   | 8.0   | 7.4    | 8.8    | 9.9              | 9.1       |           |
| West                          |                   |        |   |        |        |                  |           |           |
| Urban <sup>4/</sup>           | 7.9               | 8.3    | 7.9   | 7.9    | 8.3    | 7.5              | 8.3       |           |
| Rural nonfarm                 | 7.4               | 7.1    | 7.4   | 7.6    | 7.5    | 7.0              | 8.0       |           |
| Farm                          | 8.6               | 10.1   | 8.6   | 5.8    | 9.1    | 8.5              | 9.4       |           |
|                               | 10.4              | 16.0   | 10.2  | 10.9   | 10.9   | 9.6              | 9.8       |           |
|                               |                   |        |   |        |        |                  |           |           |
| Purchased                     |                   |        |   |        |        |                  |           |           |
| United States                 | 5.7               | 7.4    | 5.7   | 3.6    | 5.5    | 6.2              | 6.7       |           |
| Rural nonfarm                 | 5.6               | 6.5    | 5.6   | 4.2    | 5.4    | 6.5              | 6.4       |           |
| Farm                          | 1.5               | 3.9    | 1.5   | .9     | 1.9    | 2.2              | 1.6       |           |
| Northeast                     |                   |        |   |        |        |                  |           |           |
| Rural nonfarm                 | 6.1               | 7.4    | 6.1   | 4.9    | 5.7    | 6.1              | 6.7       |           |
| Farm                          | 5.6               | 4.2    | 5.6   | 4.6    | 5.3    | 6.0              | 6.1       |           |
|                               | 1.9               | 0.0    | 2.0   | 1.3    | 2.3    | 2.6              | 2.3       |           |
| North Central                 |                   |        |   |        |        |                  |           |           |
| Rural nonfarm                 | 5.7               | 8.4    | 5.8   | 4.4    | 5.2    | 5.9              | 6.3       |           |
| Farm                          | 5.9               | 7.8    | 5.8   | 5.2    | 5.7    | 5.9              | 6.3       |           |
|                               | 1.5               | 5.9    | 1.5   | 1.0    | 1.9    | 1.8              | .9        |           |
| South                         |                   |        |   |        |        |                  |           |           |
| Rural nonfarm                 | 5.0               | 6.8    | 5.0   | 2.9    | 5.3    | 6.9              | 6.9       |           |
| Farm                          | 5.1               | 5.6    | 5.1   | 3.7    | 5.2    | 7.1              | 6.9       |           |
|                               | 1.2               | 1.4    | 1.2   | .8     | 1.8    | 2.3              | 1.9       |           |
| West                          |                   |        |   |        |        |                  |           |           |
| Rural nonfarm                 | 6.8               | 6.7    | 6.8   | 5.6    | 6.7    | 6.7              | 7.4       |           |
| Farm                          | 7.4               | 9.7    | 7.3   | 5.8    | 6.8    | 7.9              | 7.6       |           |
|                               | 3.1               | 3.9    | 3.1   | 3.2    | 2.1    | 3.3              | 3.7       |           |

<sup>1/</sup> Derived from 1955 Household Food Consumption Survey, Reports 1-5. Includes negligible quantities of processed eggs, on a shell equivalent basis.

<sup>2/</sup> Data by income available only for households of 2 or more persons.

<sup>3/</sup> Money income in 1954 after income taxes.

<sup>4/</sup> Home production of eggs by urban households is relatively minor.

"At-home" consumption of all eggs--total, direct and indirect--from all sources averaged 10 percent above the comparable level for "direct-use" eggs alone. "All eggs" includes an estimate of the egg content of commercially processed foods 4/ used by households. Such indirect use of eggs per person was heaviest among northeastern and north central households. Urban households used more eggs in processed foods for the obvious reason that they were heavier consumers of such commercially processed foods.

"At-Home" Consumption  
of Chicken Averaged  
Highest in Northeast

Households in the Northeast used more chicken at home per person in spring 1955 than did those in other regions (table 7). In the South, chicken obtained without direct expense accounted for a much larger proportion of the quantity consumed than it did in other regions.

Urban households used much more chicken at home per person in a week in spring 1955 than did rural households. For chicken obtained from all sources, the urban-rural difference in consumption probably would not have been as wide if the survey had been taken at another time of the year or had covered more than a week.

Use of Eggs and  
Chicken by Households  
Reporting Consumption

"At-home" use of eggs from all sources by households reporting their use averaged a little over two dozen per household, about the same as the average for all households covered in the survey 5/ (table 8). Almost every household reported using eggs. For purchased eggs the average rate for households reporting use was a little less than two dozen, but substantially more than the corresponding average for all households. Here, the differences was due entirely to the fact that relatively fewer rural than urban households had bought the eggs used in the period surveyed. However, rural households buying eggs used substantially more than did those in urban areas.

Consumption of chicken by households reporting its use averaged more than 3 pounds per household, considerably above the average for all households in the survey (table 9). As for eggs, the difference in average consumption of purchased chicken by all households and by those reporting

4/ Bakery products, prepared flour mixes and salad dressings.

5/ The data were calculated by dividing the averages for all households by the percentage using the commodity. These comparisions would be more meaningful on a per capita basis, but no separate tabulations of household size were made for households using individual foods or groups of foods.

Table 7.- Consumption of chicken at home per person by housekeeping households, grouped by income, region and urbanization, and source of supply, in a week in spring 1955 1/

| Region<br>and<br>urbanization | :                 |        | :                          |        | Households of 2 or more persons 3/ |           |           |                     |
|-------------------------------|-------------------|--------|----------------------------|--------|------------------------------------|-----------|-----------|---------------------|
|                               | All<br>households |        | One person:<br>households: |        |                                    |           |           |                     |
|                               | 2/                |        | Total                      | Pounds | Under<br>\$2,000                   | \$2-4,000 | \$4-6,000 | \$6,000<br>and over |
|                               | Pounds            | Pounds | Pounds                     | Pounds | Pounds                             | Pounds    | Pounds    | Pounds              |
| All sources                   |                   |        |                            |        |                                    |           |           |                     |
| United States                 | 0.56              | 0.84   | 0.55                       | 0.54   | 0.52                               | 0.54      | 0.60      |                     |
| Urban 4/                      | .63               | .94    | .62                        | .65    | .59                                | .61       | .63       |                     |
| Rural, nonfarm                | .46               | .68    | .45                        | .47    | .44                                | .41       | .53       |                     |
| Farm                          | .50               | .61    | .50                        | .51    | .47                                | .45       | .65       |                     |
| Northeast                     | .61               | .79    | .61                        | .59    | .52                                | .61       | .64       |                     |
| Urban 4/                      | .67               | .82    | .67                        | .72    | .60                                | .67       | .67       |                     |
| Rural nonfarm                 | .44               | .60    | .43                        | .45    | .34                                | .44       | .50       |                     |
| Farm                          | .46               | .93    | .46                        | .51    | .42                                | .43       | .76       |                     |
| North Central                 | .54               | .91    | .53                        | .66    | .45                                | .52       | .57       |                     |
| Urban 4/                      | .60               | 1.07   | .59                        | .67    | .54                                | .59       | .58       |                     |
| Rural nonfarm                 | .43               | .74    | .42                        | .61    | .30                                | .37       | .56       |                     |
| Farm                          | .51               | .39    | .52                        | .64    | .45                                | .44       | .71       |                     |
| South                         | .57               | 1.00   | .55                        | .51    | .59                                | .52       | .62       |                     |
| Urban 4/                      | .68               | 1.19   | .66                        | .66    | .67                                | .57       | .72       |                     |
| Rural nonfarm                 | .49               | .81    | .48                        | .43    | .52                                | .48       | .48       |                     |
| Farm                          | .48               | .78    | .47                        | .44    | .49                                | .53       | .49       |                     |
| West                          | .51               | .49    | .51                        | .43    | .43                                | .49       | .62       |                     |
| Urban 4/                      | .52               | .61    | .51                        | .35    | .33                                | .54       | .60       |                     |
| Rural nonfarm                 | .47               | .18    | .48                        | .43    | .52                                | .34       | .82       |                     |
| Farm                          | .58               | .30    | .59                        | .51    | .52                                | .46       | .64       |                     |
| Purchased                     |                   |        |                            |        |                                    |           |           |                     |
| United States                 | .47               | .71    | .46                        | .32    | .43                                | .49       | .55       |                     |
| Rural nonfarm                 | .36               | .48    | .36                        | .30    | .34                                | .36       | .49       |                     |
| Farm                          | .12               | .08    | .12                        | .09    | .13                                | .15       | .17       |                     |
| Northeast                     | .58               | .72    | .57                        | .46    | .47                                | .59       | .62       |                     |
| Rural nonfarm                 | .36               | .46    | .36                        | .24    | .28                                | .40       | .41       |                     |
| Farm                          | .15               | .00    | .15                        | .13    | .10                                | .15       | .48       |                     |
| North Central                 | .44               | .75    | .43                        | .33    | .34                                | .44       | .51       |                     |
| Rural nonfarm                 | .34               | .44    | .34                        | .42    | .21                                | .33       | .54       |                     |
| Farm                          | .09               | .00    | .10                        | .07    | .11                                | .14       | .09       |                     |
| South                         | .43               | .81    | .41                        | .28    | .49                                | .45       | .54       |                     |
| Rural nonfarm                 | .38               | .60    | .38                        | .27    | .43                                | .43       | .45       |                     |
| Farm                          | .13               | .22    | .12                        | .10    | .16                                | .23       | .11       |                     |
| West                          | .43               | .45    | .43                        | .28    | .32                                | .40       | .58       |                     |
| Rural nonfarm                 | .35               | .18    | .36                        | .34    | .37                                | .20       | .82       |                     |
| Farm                          | .16               | .04    | .16                        | .17    | .12                                | .11       | .36       |                     |

1/ Derived from 1955 Household Food Consumption Survey, Reports No. 1-5. Equivalent ready-to-cook basis.

2/ Data by income available only for households of 2 or more persons.

3/ Money income in 1954 after income taxes.

4/ Home production of chicken by urban households is relatively minor.

Table 8.- Consumption of eggs at home per housekeeping household, grouped by income,  
region and urbanization in a week in spring 1955 1/

| Region and<br>urbanization                                  | All             | One-<br>person  | Households of 2 or more persons <u>3/</u> |                  |           |           |                     |        |
|---|-----------------|-----------------|---|------------------|-----------|-----------|---------------------|--------|
|   | house-<br>holds | house-<br>holds | Total                                     | Under<br>\$2,000 | \$2-4,000 | \$4-6,000 | \$6,000<br>and over |        |
|   | 2/              | 2/              | 2/  | 2/               | 2/        | 2/        | 2/                  |        |
|   | Number          | Number          | Number                                    | Number           | Number    | Number    | Number              | Number |
| a. All sources - average for all households                 |                 |                 |   |                  |           |           |                     |        |
| United States   | 24.5            | 10.2            | 25.7                                      | 23.9             | 26.3      | 26.4      | 27.0                |        |
| Urban   | 22.0            | 9.0             | 23.2                                      | 17.9             | 22.9      | 24.0      | 26.0                |        |
| Rural nonfarm   | 25.4            | 11.5            | 26.6                                      | 22.3             | 28.3      | 29.0      | 27.5                |        |
| Farm  | 36.1            | 24.1            | 36.5                                      | 33.0             | 38.6      | 40.7      | 41.4                |        |
| Northeast   | 21.5            | 12.2            | 22.6                                      | 20.3             | 21.8      | 23.0      | 25.9                |        |
| North Central   | 24.6            | 10.6            | 25.8                                      | 24.7             | 26.0      | 26.0      | 26.3                |        |
| South   | 26.8            | 11.5            | 28.2                                      | 24.6             | 29.0      | 31.6      | 30.4                |        |
| West  | 25.1            | 10.0            | 26.6                                      | 21.8             | 27.7      | 27.4      | 27.5                |        |
| b. All sources - average per household using eggs <u>4/</u> |                 |                 |   |                  |           |           |                     |        |
| United States   | 25.0            | 11.1            | 26.1                                      | 25.0             | 26.5      | 26.6      | 27.2                |        |
| Urban   | 22.4            | 9.7             | 23.5                                      | 18.9             | 23.2      | 24.2      | 26.3                |        |
| Rural nonfarm   | 26.0            | 12.5            | 27.1                                      | 23.4             | 28.7      | 29.3      | 27.5                |        |
| Farm  | 36.9            | 27.5            | 37.2                                      | 33.9             | 38.9      | 41.4      | 41.9                |        |
| Northeast   | 21.7            | 12.9            | 22.8                                      | 20.8             | 22.1      | 24.8      | 26.0                |        |
| North Central   | 24.9            | 11.1            | 26.1                                      | 24.9             | 26.4      | 26.2      | 26.5                |        |
| South   | 27.7            | 12.5            | 29.0                                      | 26.3             | 29.5      | 31.9      | 31.6                |        |
| West  | 25.9            | 12.1            | 27.1                                      | 22.4             | 28.1      | 28.2      | 27.8                |        |
| c. Purchased - average for all households                   |                 |                 |   |                  |           |           |                     |        |
| United States   | 19.0            | 8.0             | 19.9                                      | 11.8             | 19.9      | 23.0      | 24.1                |        |
| Urban   | 22.0            | 9.0             | 23.2                                      | 17.9             | 22.9      | 24.0      | 26.0                |        |
| Rural nonfarm   | 19.6            | 7.4             | 20.5                                      | 13.6             | 20.5      | 25.0      | 24.2                |        |
| Farm  | 6.4             | 5.8             | 6.4                                       | 3.7              | 7.9       | 9.6       | 7.8                 |        |
| Northeast   | 19.4            | 7.7             | 20.4                                      | 13.9             | 19.4      | 21.7      | 24.5                |        |
| North Central   | 19.0            | 8.9             | 19.8                                      | 12.1             | 18.4      | 21.8      | 23.4                |        |
| South   | 17.6            | 7.4             | 18.6                                      | 10.7             | 20.5      | 25.6      | 25.7                |        |
| West  | 21.5            | 8.2             | 22.9                                      | 15.4             | 22.4      | 24.5      | 24.2                |        |
| d. Purchased - average per household using purchased eggs   |                 |                 |   |                  |           |           |                     |        |
| United States   | 23.2            | 10.3            | 24.2                                      | 20.7             | 23.8      | 25.3      | 26.2                |        |
| Urban   | 22.4            | 9.7             | 23.5                                      | 18.9             | 23.2      | 24.2      | 26.3                |        |
| Rural nonfarm   | 25.3            | 11.5            | 26.1                                      | 22.5             | 26.8      | 28.3      | 27.0                |        |
| Farm  | 31.1            | 22.1            | 31.2                                      | 26.2             | 31.6      | 34.1      | 32.2                |        |
| Northeast   | 21.0            | 8.6             | 22.0                                      | 17.9             | 19.4      | 22.7      | 25.6                |        |
| North Central   | 23.1            | 10.8            | 24.1                                      | 19.9             | 23.3      | 24.6      | 25.7                |        |
| South   | 25.4            | 11.3            | 26.7                                      | 22.1             | 27.2      | 30.1      | 29.2                |        |
| West  | 24.5            | 11.4            | 25.6                                      | 19.3             | 26.3      | 27.0      | 26.2                |        |

1/ Derived from 1955 Household Food Consumption Survey Reports 1-5. Includes negligible quantities of processed eggs, on a shell equivalent basis.

2/ Data by income available only for households of 2 or more persons.

3/ Money income in 1954 after income taxes.

4/ Average use of eggs obtained without direct expense, per household using, number: U. S. - all urbanizations 32.5, rural nonfarm 37.4, farm, 39.0; all urbanizations in Northeast 32.3, North Central 33.5, South 32.2, and West 39.6.

Table 9.- Consumption of chicken at home per housekeeping household grouped by income, region and urbanization, in a week in spring 1955 1/

| Region and urbanization  | One-person households                       |               | Households of 2 or more persons <u>3/</u> |               |           |           |                  |
|--|---|---------------|---|---------------|-----------|-----------|------------------|
|  | All households                              | households 2/ | Total                                     | Under \$2,000 | \$2-4,000 | \$4-6,000 | \$6,000 and over |
|  | Pounds                                      | Pounds        | Pounds                                    | Pounds        | Pounds    | Pounds    | Pounds           |
|  | a. All sources - average for all households |               |   |               |           |           |                  |
| United States  | 1.87  | 0.92          | 1.96                                      | 1.80          | 1.88      | 1.98      | 2.16             |
| Urban  | 1.97  | .99           | 2.07                                      | 1.81          | 1.98      | 2.12      | 2.11             |
| Rural nonfarm  | 1.58  | .78           | 1.65                                      | 1.53          | 1.65      | 1.60      | 1.98             |
| Farm   | 2.03  | .90           | 2.06                                      | 1.97          | 1.95      | 1.99      | 3.06             |
| Northeast  | 1.94  | .82           | 2.04                                      | 1.68          | 1.76      | 2.16      | 2.03             |
| North Central  | 1.78  | .96           | 1.85                                      | 1.83          | 1.58      | 1.89      | 2.13             |
| South  | 2.00  | 1.11          | 2.08                                      | 1.85          | 2.28      | 1.97      | 2.18             |
| West   | 1.61  | .59           | 1.71                                      | 1.16          | 1.39      | 1.79      | 2.06             |
| b. All sources - average per household using chicken <u>4/</u> |   |               |   |               |           |           |                  |
| United States  | 3.52  | 2.27          | 3.61                                      | 3.51          | 3.46      | 2.59      | 3.81             |
| Urban  | 3.47  | 2.21          | 3.57                                      | 3.00          | 3.40      | 3.71      | 3.72             |
| Rural nonfarm  | 3.38  | 2.41          | 3.44                                      | 3.48          | 3.36      | 3.24      | 3.90             |
| Farm   | 4.18  | 3.41          | 4.20                                      | 4.01          | 4.07      | 4.06      | 5.35             |
| Northeast  | 3.80  | 2.20          | 3.91                                      | 2.33          | 4.15      | 4.01      | 4.41             |
| North Central  | 3.65  | 2.75          | 3.72                                      | 3.76          | 3.66      | 3.66      | 3.81             |
| South  | 3.22  | 2.18          | 3.29                                      | 3.43          | 3.34      | 3.03      | 3.09             |
| West   | 3.47  | 1.63          | 3.60                                      | 3.04          | 2.98      | 3.71      | 4.03             |
| c. Purchased - average for all households                      |   |               |   |               |           |           |                  |
| United States  | 1.56  | .78           | 1.63                                      | 1.04          | 1.58      | 1.77      | 1.98             |
| Urban  | 1.97  | .99           | 2.07                                      | 1.81          | 1.98      | 2.16      | 2.11             |
| Rural nonfarm  | 1.27  | .54           | 1.36                                      | .98           | 1.33      | 1.41      | 1.82             |
| Farm   | .50   | .12           | .51                                       | .37           | .55       | .69       | .80              |
| Northeast  | 1.83  | .75           | 1.92                                      | 1.30          | 1.64      | 2.11      | 2.25             |
| North Central  | 1.45  | .79           | 1.51                                      | .94           | 1.22      | 1.66      | 1.88             |
| South  | 1.51  | .89           | 1.57                                      | 1.02          | 1.88      | 1.66      | 1.90             |
| West   | 1.35  | .55           | 1.43                                      | .77           | 1.08      | 1.47      | 1.93             |
| d. Purchased - average per household using purchased chicken   |   |               |   |               |           |           |                  |
| United States  | 3.37  | 2.20          | 3.46                                      | 3.09          | 3.30      | 3.53      | 3.71             |
| Urban  | 3.47  | 2.21          | 2.57                                      | 3.00          | 2.40      | 3.71      | 3.72             |
| Rural nonfarm  | 3.29  | 2.37          | 3.33                                      | 3.36          | 3.21      | 3.18      | 3.97             |
| Farm   | 3.25  | 1.71          | 3.26                                      | 3.06          | 3.21      | 3.49      | 4.06             |
| Northeast  | 3.79  | 2.22          | 3.88                                      | 3.03          | 2.56      | 4.00      | 4.45             |
| North Central  | 3.47  | 2.58          | 3.52                                      | 3.29          | 3.38      | 3.58      | 3.61             |
| South  | 2.97  | 2.10          | 3.03                                      | 2.99          | 3.17      | 2.85      | 2.94             |
| West   | 3.33  | 1.62          | 3.48                                      | 2.81          | 2.69      | 3.63      | 4.05             |

1/ Derived from 1955 Household Food Consumption Survey, Reports No. 1-5. Ready-to-cook basis.

2/ Data by income available only for households of 2 or more persons.

3/ Money income in 1954 after income taxes.

4/ Average use of chicken obtained without direct expense, per household using, pounds: U. S. - all urbanizations 4.25, rural nonfarm 3.52, farm 5.58; all urbanizations in Northeast 4.07, North Central 4.65, South 4.05, and West 4.26.

its use was relatively much greater than for chicken obtained from all sources. Here, too, the difference arose primarily from supplies rural households obtained without direct expense. Rural households which purchased chicken tended to use moderately less than did the corresponding urban households.

Households which used chicken and eggs obtained without direct expense consumed much more of these products per household than did those which used purchased supplies only (footnote 4/ in tables 8 and 9). Home production of poultry products is concentrated in rural areas. As the nation becomes more urbanized, average consumption of chicken and eggs may decline even though the quantity sold through commercial channels may increase.

Among households which used eggs obtained without direct expense in the week reported, those in the West used more per household than did similar ones in other regions. Farm households which used non-purchased eggs consumed moderately more than did rural nonfarm households.

The difference in the average number of eggs used at home by households using supplies obtained without direct expense and those using purchased supplies was smallest in the South and largest in the West. A similar comparison by urbanization indicates that the difference was smaller for farm than rural nonfarm households.

Consumption by households using chicken obtained without direct expense was highest in the North Central Region and lowest in the Northeast and South. The difference between "at-home" consumption of chicken obtained without direct expense and that from purchased sources was less per using household in the Northeast than in any other region.

Among rural households, higher incomes seem to result in increased reliance on purchased supplies of chicken and eggs, and less on supplies from other sources.

Average "At-Home" Consumption of Eggs About  
Same At Most Income Levels; Chicken  
Consumption Higher At Higher Incomes

The apparent stability of egg consumption per person in relation to income for all U. S. households 6/ combined results from the particular combination of the income relationships of households in the 3 urbanization categories. They were: (1) Urban, average consumption significantly larger at successively higher income levels; (2) rural nonfarm, a rise with income up to the \$3-5,000 income level then lower averages; (3) farm, higher consumption by households in middle income range. These U. S. patterns for each urbanization category reflect in turn the diverse regional patterns shown in table 8. These diversities apparently are tied closely to extent of home production.

6/ Data by income are available only for households of 2 or more persons.

Consumption of chicken at home per person was higher at successively higher levels of income beginning with the \$3-4,000 income group. The relatively smooth rise in average use after this income level reflects mainly the pattern among urban households. Chicken consumption among rural households in the period surveyed fluctuated widely by income. At most levels of income, use of chicken was heavier for urban than rural households. Consumption of purchased chicken by rural households tended to be much higher among households at higher income levels.

The leading role in "at-home" consumption of chicken per person at the various incomes was shared by households in the Northeast and South. Those in the Northeast tended to have the highest average for the purchased commodity.

The pattern of consumption of all eggs--total, direct and indirect--was very similar to that for direct use alone. This was because most eggs are brought into the home in shell form. Estimated indirect consumption of eggs per person tended to be higher at higher levels of income, reflecting patterns of consumption of commercially processed foods. This is also indicated by the fact that indirect use of eggs per person averaged highest among urban households at almost every income level, and least among farm households.

#### Comparison Between Chicken and Egg Consumption Averages From Survey and Disappearance Data

When necessary adjustments are made in survey data to bridge the differences in concept and coverage between them and the consumption data based on annual disappearance of chicken and eggs <sup>7/</sup>, the two sets of data turn out to be fairly consistent.

Consumption of chicken at home by housekeeping households in a week in spring 1955 averaged 0.56 pounds per person, all converted to an eviscerated basis. On a seasonally adjusted basis, this was at an annual rate of 26.5 pounds <sup>8/</sup>. According to disappearance data, the chicken consumption rate for 1955 is 21.4 pounds (eviscerated basis) per person.

<sup>7/</sup> Annual disappearance data are published in the 1956 Supplement to Consumption of Food in the United States, 1909-52, U. S. Department of Agriculture, A. H. No. 62, September 1957.

<sup>8/</sup> Consumption of 0.56 pounds of chicken in a week is equivalent to an annual rate of 29.1 pounds. Based on the seasonal pattern of marketings of commercial broilers, chicken consumption in a week in spring 1955 was assumed to be 10 percent above the annual average. Thus, the adjusted average for consumption at home by households is estimated at 26.5 pounds per person. See article: "Seasonal Changes in Broiler Chick Placement and Marketing," The Poultry and Egg Situation, May 1956.

Much of the difference between the averages for chicken consumption derived from the survey data and from disappearance data arises from differences in the estimate of how much home-produced chicken is consumed. Survey statistics on home-produced food in 1954 indicated that the national average rate of chicken consumed from this source was 5.1 pounds (eviscerated basis). It is reasonable to assume that this level of consumption held in 1955. Disappearance data for 1955 included an estimate of only 2.2 pounds per capita for consumption out of home-produced supplies.

The estimate of consumption of purchased chicken in 1955 based on the survey data (21.4 pounds, eviscerated basis) was 10 percent higher than the estimated rate derived from disappearance data (19.2 pounds). A differential of this size can be attributed to differences between the average amount of chicken used per 1,000 meals served at home by housekeeping households and that served for meals away from home by this population, by non-housekeeping households and by persons living in institutions.

According to the survey, shell egg consumption at home averaged 7.3 eggs per person. But adjustments should be made to allow for the fact that eggs are eaten mostly for breakfast and few breakfasts are eaten away from home by the housekeeping population.<sup>9/</sup> On an adjusted basis, the survey average was 6.8 eggs. This compares with national average disappearance of 6.5 shell eggs per week in the spring quarter of 1955. Disappearance data relate to consumption at home and away from home by housekeeping and non-housekeeping households, as well as use of shell eggs by institutions and by food processors other than those who produce frozen eggs.

#### Surveys Indicate "At Home" Use of Eggs

Greatest At Breakfast; Frying Most Popular Way to Cook Chicken and Eggs

The spring 1955 survey of food consumption was not designed to yield information on household practices in the use of these foods at home. But special surveys made at other times provide keys to household use of chicken and eggs.

A survey made in 3 cities in 1953 on household practices in the use of food at home 10/, revealed that:

1. The principal use of shell eggs was at the table as egg dishes, rather than as components of mixed dishes.

9/ A detailed discussion of the adjustment of the egg consumption averages from the survey and the reconciliation with the disappearance rate is available in an article by Marguerite C. Burk: "Introduction to 1955 Survey Data on Eggs," The Poultry and Egg Situation, May 1957

10/ Household Practices in the Use of Foods, Three Cities, 1953, U. S. Department of Agriculture, A. I. B. No. 146, April 1956. The surveys were made in a week in spring 1953 in Birmingham, Ala., and Indianapolis, Ind., and in fall 1953 in Everett, Wash.

2. From 35 to 45 percent of the households served eggs at breakfast only, and over half of the households in the survey served eggs at breakfast and other meals.
3. Of the shell eggs used at the table, from 75 to 80 percent were served at breakfast and the remainder at noon or evening meals.
4. More low- than high-income households in each of the 3 cities served eggs at breakfast only.
5. Of the eggs reported being used at the table nearly half were served as fried eggs. In both Everett and Indianapolis, the second most important form was "soft cooked or poached;" in Birmingham, scrambled eggs ranked second.
6. More high- than low-income households used soft-cooked or poached eggs. This may have been related to price and therefore to quality of eggs used at home.

In the fall of 1948, a survey of food consumption in 4 cities 11/ collected additional information from about 150 housekeeping households in each city on the food eaten at home at each meal and between meals on the day preceding the interview. Unpublished data of the Institute of Home Economics from this survey indicate that of the households reporting their menu for the day, at least half of them served eggs at breakfast and relatively few 12/ served them at the principal meal of the day.

Of the breakfast menus which contained eggs, in 3 of the 4 cities relatively more households served eggs alone than they did eggs in combination with meat or in addition to cereal or waffles. In Birmingham, a little over half of the households reported serving eggs and meat. This combination was the second in popularity for households in the Minneapolis - St. Paul area, but as many in Buffalo and San Francisco served eggs and meat as they did eggs in addition to cereal. The menus represent servings to the household. Accordingly, individual members could have eaten all or one or none of the selections served. Also, the menus apply to a day in fall 1948 in the 4 cities; they are not necessarily typical of breakfast menus throughout the year and the country.

Replies from a consumer survey 13/ on the poultry made in June and July 1956 indicate that in the preceding 12 months 94 percent of the

11/ The results of the urban surveys in 1948 and 1949 among housekeeping households of 2 or more persons are presented in Food Consumption of Urban Families in the United States, U. S. Department of Agriculture, A. I. B. No. 132, October 1954. Menu data were obtained from housekeeping households consisting of 2 adults, no more than 2 children between the ages of 2 and 15 years, and no others. 12/ Of the number reporting their menu for the day, 3 percent each of the households in Birmingham, Buffalo and Minneapolis - St. Paul, and 6 percent of those in San Francisco reported serving egg dishes at the main meal of the day. The latter was mainly the evening meal. 13/ Selected Highlights From a Study of Consumers' Use of and Opinions About Poultry, U. S. Department of Agriculture, AMS-159, January 1957.

homemakers had served broilers or fryers as fried chicken. About 1 user in 3 indicated that this was the only way they served broiler-fryers. Forty one percent of the homemakers said they had served these birds baked or roasted, 26 percent had served them broiled, and 17 percent as barbecued.

#### Average Use of Poultry and Eggs

At Home by Urban Households in  
A Week in Spring Higher in 1955  
Than in 1942 or 1948

Urban use of shell eggs at home per person in a week in spring 1955 averaged higher than in a similar period in 1948 (table 10). The increase was general at almost all levels of income. The level of egg consumption in 1948 was significantly higher than in a week in spring 1942.

Relationships of average urban consumption of eggs per person to average income were about the same in 1948 as in 1955, rising at higher levels of income. The 1942 survey data indicated some rise up to the middle-income range and then a decline.

Indirect use of eggs at home per person was higher in spring 1955 than in 1948. In each of the three periods indirect use of eggs at home by urban households tended to rise with income.

Urban poultry consumption per person in spring 1955 was higher both for all households and for households at comparable levels of income than in 1942 and 1948. In each period, more poultry was used by households at higher levels of income than by lower-income groups.

This general rise in poultry consumption by urban households resulted primarily from increased supplies of commercial broilers and turkey, a smoothing out of the seasonality of chicken and turkey supplies, increased availability across the country and lower prices, particularly since the end of World War II. The effect on average U. S. consumption of the shift in population from rural to urban areas between 1942 and 1955 appears to have been negligible. The higher level of income and shift in distribution of income among U. S. civilians have contributed to increased consumption but not nearly as much as the changes in supplies. This conclusion is based on an analysis of the relationships between consumption and income indicated by the 3 sets of survey data.

#### Future Prospects For Poultry Products

Consumption patterns and relationships obtained from an analysis of the 1955 Household Food Consumption Survey provide another segment of information needed in evaluating the long-term prospects for poultry products. Using the survey data on consumption per person of chicken and eggs at each income level in each urbanization, and projections for 1975 of the level and distribution of income and the distribution of the population by urbanization, several conclusions can be drawn. Only a small increase in per capita consumption

Table 10.- Consumption of poultry products at home per person by urban housekeeping households of 2 or more persons grouped by income, in a week in spring 1942, 1948, and 1955 1/

| Income group 2/      | 1942  | 1948  | 1955  |
|----------------------|-------|-------|-------|
| Shell eggs 3/        |       |       |       |
| Average, all incomes | No.   | No.   | No.   |
| Under \$500          | 5.1   | 6.8   | 7.0   |
| \$500 - 1,000        | 4.6   | } 6.0 | } 6.6 |
| \$1,000 - 1,500      | 4.7   |       |       |
| \$1,500 - 2,000      | 4.2   | } 6.2 | } 6.4 |
| \$2,000 - 2,500      | 5.4   |       |       |
| \$2,500 - 3,000      | 5.3   | } 6.5 | } 6.6 |
| \$3,000 - 4,000      | 5.4   |       |       |
| \$4,000 - 5,000      | } 4.9 | 6.8   | 6.7   |
| \$5,000 - 6,000      |       | 7.5   | 6.6   |
| \$6,000 - 7,500      | } 7.0 | } 7.3 | } 7.2 |
| \$7,500 - 8,000      |       |       |       |
| \$8,000 - 10,000     | } 5.0 | 7.4   | 7.6   |
| \$10,000 and over    |       | } 7.4 | 8.2   |
| Poultry 4/           |       |       |       |
| Average, all incomes | Lb.   | Lb.   | Lb.   |
| Under \$500          | .36   | .46   | .76   |
| \$500 - 1,000        | .23   | } .58 | } .46 |
| \$1,000 - 1,500      | .25   |       |       |
| \$1,500 - 2,000      | .24   | } .42 | } .80 |
| \$2,000 - 2,500      | .24   |       |       |
| \$2,500 - 3,000      | .30   | } .43 | } .67 |
| \$3,000 - 4,000      | .39   |       |       |
| \$4,000 - 5,000      | } .46 | .42   | .69   |
| \$5,000 - 6,000      |       | .54   | .71   |
| \$6,000 - 7,500      | } .64 | .53   | .82   |
| \$7,500 - 8,000      |       | } .70 | } .80 |
| \$8,000 - 10,000     |       |       |       |
| \$10,000 and over    |       | } .87 |       |

1/ Compiled from AIB-132, Food Consumption of Urban Families in the United States, 1948 and Report No. 1 of 1955 Household Food Consumption Survey, Food Consumption of Households in the United States.

2/ Disposable money income per family in current dollars in 1942 (first quarter income at annual rate), 1947 and 1954.

3/ Data for 1955 include negligible quantities of processed eggs, shell equivalent basis.

4/ Chicken and turkey, ready-to-cook basis.

of these poultry products from all sources can be expected in the next two decades to result from increased income or shift in population away from farms or both. However, income and urbanization changes are likely to increase substantially the per capita use of purchased poultry products since consumption of the purchased products is higher at higher levels of income and home production of food will likely be less important in the future.

Some rise in the consumption of chicken and eggs per person over the next two decades seems possible, though mainly for reasons other than change in income and its distribution or urbanization. For chicken an increase in the consumption rate is likely to reflect both the application of further technical improvements in broiler production and the increased availability of broilers throughout the nation. Changes due to these reasons may not be as sharp as they have been in the past 10 to 15 years when there was considerable technological progress in commercial production and marketing of broilers, and an important part of the reduced costs were passed on to consumers.

Continued improvement and application of technology in production and marketing of eggs will likely result in lower prices to consumers. This probably will bring about a small rise in average consumption of eggs per person in this country. A small increase in average use of eggs, combined with less production for home use, will result in a substantially larger demand for the commercially produced and marketed commodity.

The outlook for chicken and eggs has been presented in terms of changes in use per person. Because of the prospective population increase of over one-third by 1975, increases in the consumption rate will be magnified accordingly.





